

**[0018]** FIG. 29: Gating strategy for Nectin-4 in Breast (T-47D and MDA-MB-468).

**[0019]** FIG. 30: Gating strategy for Nectin-4 in NCI-H292 and NCI-H322.

**[0020]** FIGS. 31 and 32: Gating strategy for Nectin-4 in NCI-H526 and HT1080, respectively.

**[0021]** FIGS. 33-37: Gating strategy for Nectin-4 in Bladder cancer (HT1376; FIG. 33), Breast cancer (MDA-MB-468; FIG. 34), Colorectal cancer (HT-29; FIG. 35A and HCT-116; FIG. 35B), Lung cancer (A549; FIG. 36A, NCI-H292; FIG. 36B, NCI-H358; FIG. 36C and NCI-526; FIG. 36D), and Pancreas cancer (Panc02.13; FIG. 37), respectively.

**[0022]** FIGS. 38-41: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female Balb/c nude mice bearing A549 xenograft.

**[0023]** FIGS. 42-45: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female Balb/c nude mice bearing HCT116 xenograft.

**[0024]** FIGS. 46-49: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female CB17-SCID mice bearing HT-1376 xenograft.

**[0025]** FIGS. 50-53: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female Balb/c nude mice bearing MDA-MB-468 xenograft.

**[0026]** FIGS. 54-57: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female Balb/c nude mice bearing NCI-H292 xenograft.

**[0027]** FIGS. 58-59: Tumor volume traces after administering BCY8245 and BCY8255, respectively, to female Balb/c nude mice bearing NCI-H526 xenograft. FIGS. 60-63: Tumor volume traces after administering BCY8242, BCY8245, BCY8253, and BCY8255, respectively, to female Balb/c nude mice bearing Panc2.13 xenograft.

**[0028]** FIG. 64: Tumor volume traces after administering BCY8245, BCY8781 or BCY8245 in combination with BCY8234 to female Balb/c nude mice bearing MDA-MB-468 xenograft.

**[0029]** FIG. 65: Tumor volume traces after administering BCY8245 alone or BCY8245 in combination with BCY8234 to female Balb/c nude mice bearing MDA-MB-468 xenograft.

**[0030]** FIGS. 66-71: Tumor volume traces in Lu-01-0412, LU-01-0007, CTG-1771, CTG-1171, CTG-1106, and CTG-0896 PDX xenografts.

**[0031]** FIG. 72: BT8009 (i.e. BCY8245) efficacy correlates with expression CDX/PDX xenografts. Xenografts with little/no Nectin-4 expression show reduced tumour growth rate. Xenografts expressing Nectin-4 show regressions of tumour. Both PDX and CDX models are included in this analysis, values are collated from various reports.

**[0032]** FIG. 73: MDA-MB-468 cells express Nectin-4 and show prolonged retention of MMAE in tumour.

**[0033]** FIG. 74: HCS—Data analysis on MDA-MB-468 cell line.

## DETAILED DESCRIPTION OF THE INVENTION

**[0034]** In one embodiment, said loop sequences comprise 3, 6, 7, 8 or 9 amino acids. In a further embodiment, said loop sequences comprise 3, 6, 7 or 9 amino acids. In a yet further embodiment, said loop sequences comprise 3 or 9 amino acids.

**[0035]** In a further embodiment, said loop sequences comprise three cysteine residues separated by two loop sequences one of which consists of 3 amino acids and the other of which consists of 9 amino acids.

**[0036]** In a further embodiment, said loop sequences comprise three cysteine residues separated by two loop sequences one of which consists of 3 amino acids and the other of which consists of 8 amino acids.

**[0037]** In a further embodiment, said loop sequences comprise three cysteine residues separated by two loop sequences one of which consists of 7 amino acids and the other of which consists of 3 amino acids.

**[0038]** In a further embodiment, said loop sequences comprise three cysteine residues separated by two loop sequences both of which consist of 6 amino acids.

**[0039]** In one embodiment, said peptide ligand comprises an amino acid sequence selected from:

(SEQ ID NO: 38)

$C_i\text{-P/A/Hyp-F/Y-G/A-C}_{ii}\text{-X}_1\text{-X}_2\text{-X}_3\text{-W/1-Nal/2-Nal-S/A-X}_4\text{-}$

$P\text{-1/D/A-W/1-Nal/2-Nal-C}_{iii}$ ;

(SEQ ID NO: 39)

$C_i\text{-W/A-P-L-D/S-S/D-Y-W-C}_{ii}\text{-X}_5\text{-R-I-C}_{iii}$ ;

(SEQ ID NO: 40)

$C_i\text{-V-T-T-S-Y-D-C}_{ii}\text{-F/W-L/V-H/R/T-L-L/G-Q/H-C}_{iii}$ ;

(SEQ ID NO: 41)

$C_i\text{-X}_6\text{-X}_7\text{-X}_8\text{-C}_{ii}\text{-X}_9\text{-X}_{10}\text{-X}_{11}\text{-X}_{12}\text{-X}_{13}\text{-X}_{14}\text{-X}_{15}\text{-X}_{16}\text{-X}_{17}\text{-C}_{iii}$ ;  
and

(SEQ ID NO: 42)

$C_i\text{-W/A/Y-P/A-L-D/S/A-S/D/P/A-Y-W/1-Nal-C}_{ii}\text{-X}_5\text{-R/HArg/}$

$A\text{-I-C}_{iii}$ ;

wherein:

**[0040]**  $X_1\text{-X}_5$  represent any amino acid residue, including modified and non-natural amino acids;  $X_6$  represents: Gly; Pro or a non-natural derivative of Pro selected from azetidine (Aze), hydroxyproline (Hyp), 4-amino-proline (Pro (4NH)), oxazolidine-4-carboxylic acid (Oxa), octahydroindolecarboxylic acid (Oic) or 4,4-difluoroproline (4,4-DFP); Ala or a non-natural derivative of Ala selected from aminoisobutyric acid (Aib); or Sarcosine (Sar);

**[0041]**  $X_7$  represents: Phe or a non-natural derivative of Phe selected from 3-methyl-phenylalanine (3MePhe), 4-methyl-phenylalanine (4MePhe), homophenylalanine (HPhe), 4,4-biphenylalanine 4,4-BPA) or 3,4-dihydroxy-phenylalanine (DOPA); Tyr; or Ala or a non-natural derivative of Ala selected from 1-naphthylalanine (1-Nal), 2-naphthylalanine (2-Nal) or 2-pyridylalanine (2Pal);

**[0042]**  $X_8$  represents: Gly; Ala; Asp; Lys or a non-natural derivative of Lys selected from acetyl-lysine (KAc or Lys (Ac)); Phe; Glu; Gln; Leu; Ser; Arg; or cysteic acid (Cya);

**[0043]**  $X_9$  is either absent or represents: Met or a non-natural derivative of Met selected from methionine sulfone (Met(O2)); Gln or a non-natural derivative of Gln selected